

broader in scope than the currently finally rejected claims 1, 4 and 6-15 of this application.

Claim 1 herein defines the attachment as “consisting essentially of” the claimed elements in contrast to the “comprising” wording of the appealed claim. Claim 1 of this application also incorporates the hook width limitation of original claim 2 thus more narrowly defining and limiting this hook fastener to a very limited and highly select type of hook fastener amongst a very broad and large class of fasteners. The salient issue of the current 35USC103(a) rejections hinges upon whether or not this newly cited Smerdon patent provides the necessary 35USC103(a) teachings saliently absent in the appeal and thus cures the prior art defects of the parent appeal as so astutely noted by the Board of Appeals in Appeal No. 2004-2020. Applicant respectfully submits that the Smerdon Jr. Patent fails to correct the 35USC103(a) deficiencies of the cited art of record. The Board of Appeals decision therefore dictates that the 35USC103(a) rejections of this final rejection should be withdrawn and that applicant’s claims be allowed.

Applicant incorporates by reference herein the decision of the Board of Appeals in which the same grounds of rejecting applicant’s claims herein were resoundly reversed by the Board of Appeals. Applicant also incorporates by reference herein all of the responses including all the papers filed by applicant’s attorney in the parent application including those of the appeal before the Board of Appeals as part of this response. There should be no need to further argue about any admissions against interest by the applicant since the Board of Appeals carefully considered this issue and clearly held it was not an issue in this case. The Board of Appeals also clearly held that it is the responsibility of the Examiner to establish a prima facie case of obviousness by establishing those art founded facts which would fairly teach and suggest that one of ordinary skill the claimed embodiments of the applicant’s invention. This requires that the prior art (not applicant’s own teachings) fairly teach and suggest that the unique, very select and highly

specific claimed monofilament hooked material embodiments as narrowly defined by an average monofilament of at least 8.0 mil, an average hook height of at least 1.85 mm, an average hook width of at least 1.0 mm, and average depth of at least 0.6 mm with the hooks being of a spiral configuration arranged in respective rows of at least 250 hooks per square inch and that such claimed embodiments would possess the unexpectedly superior efficacy in tangentially retrieving a grounded tennis ball from a tennis court.

The prior art as cited by the Examiner herein clearly teaches (as acknowledged and held by the Board of Appeals) that what applicant has accomplished herein cannot be accomplished and that such unobvious claimed embodiments were not clearly taught by the cited art. The prior art further provides no motivation, no suggestive teachings nor cogent reason why one of ordinary skill (amongst a myriad of other choices) would be lead to a uniquely distinctive, highly specific and atypical monofilament hooked material which has been solely found by the applicant to unexpectedly possess superior efficacy in retrieving a grounded tennis ball.

The Office Action lacks all those prerequisite facts, as well as those legal principles upon which to predicate a *prima facie* case of obviousness rejection of Applicant's claims 1, 4 and 6-15. Every applicant is entitled to an unbiased adjudication and presentation of those facts upon which any 35USC103 rejection may be properly based. It is an essential prerequisite for all 35USC103 rejections that the prior art alone fairly teach and suggest the claimed invention without any reliance upon Applicant's inventive contribution to establish untaught facts as well as providing sufficient enabling guidance to enable the artisan of ordinary skill to make and use the invention as claimed by the Applicant. It is also an essential prerequisite of any 103 rejection that all claimed limitations of any rejected claim must be taught by a fair appraisal of those prior art teachings which are relied upon in the 35USC103 rejection. It is axiomatic under any

35USC103 rejection that the references must be reviewed in their entirety for what each reference teaches. It is completely impermissible to disregard teachings in a cited reference which are totally contradictory to the manner in which the references are combined with one another in the rejection of record. If a reference teaches that a certain result cannot be achieved using what is alleged to be an equivalent, the reference cannot be regarded to be suggestive of teaching something that cannot be accomplished. It is also self-evident that references when they are applied to the 103 rejection in a reference combination may not be modified to such an extent that the modification renders the reference or patent inoperable for its intended purpose or function. Unexpected results accomplished in view of the unachievable teachings of the cited art of record should under 35USC103 remain unexpected. These obviousness standards have not been obviously applied to the final rejection of record.

In paragraph 2 of the Office Action, claims 1, 4, 6, 7, 9, 10 and 12 stand rejected under 35USC103(a) as being unpatentable over one of the U.S. Patent 4,834,393 (Feldi) or French Patent Number 2,594,037 (Musslin) either in view of U.S. Patent Number 5,077,870 (Melbye et al hereinafter referred to as Melbye), U.S. Patent Number 6,401,997 (Smerdon Jr. hereinafter referred to as Smerdon) and applicant's alleged admission of the prior art (referred to as AAPA). The grounds for rejecting the claims 1-4, 6-15 under 35USC103(a) are therefore essentially identical to the precise grounds in which the Examiner was already reversed in the parent application Board of Appeals No. 2004-2020 with the exception that the rejection of the claims in this application additionally relies upon US. Patent 6,401,997 by Smerdon Jr. as a secondary or tertiary reference.

The reliance upon the Feldi patent as a primary reference in the rejection of claims 1, 4, 6, 7, 9, 10 and 12 remains identical to the that in the appeal of the parent application. Similarly, the

reliance upon the Musslin French patent as an alternative primary reference remains substantially identical to the same grounds and same issues considered by the Board of Appeals in the appealed claims of the parent application. Similarly, the same grounds and issues upon which the Melbye patent has now been relied upon in the rejection of applicant's claims 1, 4, 6, 7, 9, 10, and 12 herein this application remain substantially identical to those grounds and issues which were relied upon by the Examiner in the parent application claims before the Board of Appeals, all of which grounds were totally reversed and not sustained by the Board of Appeals in the parent application appeal.

As should be self-evident in this Office Action, the Board of Appeal readily recognized that the alleged grounds for admission of equivalency against interest or prior art admissions (AAPA) by applicant were without any legal merit and so held in its carefully considered opinion. Notwithstanding, the Board of Appeals decision and MPEP guidelines holding completely to the contrary to the position again mistakenly taken herein by the Examiner, the Office Action relies upon an alleged AAPA because there simply does not exist any art recognized authority to factually support the Examiner's unfounded assertions. This constitutes nothing more than relying upon applicant's own findings (not prior art) to provide the rationale and motivation for supplying unknown facts which are clearly not taught by the art of record. Applicant's own teaching and discoveries cannot form the factual basis for predicating a 35USC103(a) rejection. The prior art alone must provide the underlying facts upon which to predicate a 35USC103(a) rejection. The reliance upon applicant's own teachings constitutes nothing more than hindsight reconstruction of the prior art.

The Office Action clearly admits that Feldi, Musslin, or Melbye (as well as Urwin) all fail to disclose the recited hook size parameters such as monofilament diameter, hook height, hook

width or hook depth, all of which the Board of Appeals chastised the Examiner for not setting forth the required art founded facts notoriously held to be an essential factor or requirement in order to sustain any 35USC103 rejection. Lacking the same want of factual justification, the 35USC103(a) rejections of record must likewise fail. The newly cited Smerdon patent bears no relevancy to the nature or character of monofilament hooks or the use of monofilament hooks in the absence of the mating loop fasteners and adhesive backing as is generally the case of all hook and fasteners as designed to adhesively adhere to substrates to which they are applied such as the water tube and the bicycle handlebar stem applications of the Smerdon patent.

### **FACTUAL RESOLUTION**

Before there can be any resolution of the 35 U.S.C. 103 issues herein, it is first necessary to establish Fact from Fiction. The following facts are clearly elucidated by each of the cited patent teachings as a whole. The facts are as follows:

#### **Feldi Facts**

1. **FACT** - The primary reference *Feldi* states that, “a hook material (ex. VELCRO) when affixed to the end of a tennis ball racket “ “does not effectively pick up a” standard tennis ball with this system”, and that the standard material is not compatible with the hook fastener system... in that, “the hooked material destroys the tennis ball covering.”
2. **FACT** - a VELCRO hook material of the type as tested and described by *Feldi* does not work (via tangential contact) upon the tennis ball felt cover as claimed.
3. **FACT** - The *Feldi* solution to the problem is to eliminate the tennis ball pile covering by replacing the pile covering with one of a nylon VELCRO loop fastener combination so that the VELCRO hook will then hook and fasten onto the nylon loop or hook ball covering. (Both the hook and loop must be used to work.)

4. **FACT** - Applicant's claims recite a ball retrieving attachment "for engaging and lifting a grounded *tennis ball* upon **tangential contact** with said *tennis ball* ... for engaging and lifting the grounded *tennis ball* upon tangential contact with said hooks."

5. **FACT** - The altered ball of *Feldi* is not a tennis ball, since a tennis ball by standard of identity "must be covered with felt." Felt is notoriously known and defined<sup>1</sup> as "a cloth or fabric made of wool, or of wool and fur or hair." Neither the VELCRO hook nor loop material of *Feldi* is of wool. Therefore, the altered ball of *Feldi* is not a tennis ball and does not meet the claimed "tennis ball" requirements of Applicant's claims. (Applicant encloses herewith Wilson Sporting Good's response to tennis ball standards<sup>2</sup>).

6. **FICTION** - There is no basis, in fact, for the speculative conclusion that "the claims do not preclude changing the tennis ball pile and the *Feldi* racket itself, as modified above, would inherently function as recited." Inherency does not apply since inherency must be proven and requires identity of substance, (also the retrieval with a ball retrieving attachment involves a tennis ball vs. a non-tennis ball).

7. **FACT** - Applicant's claims prescribe a tennis ball and, therefore, the non-tennis ball teachings of *Feldi* is precluded by Applicant's claims.

8. **FACT** - *Feldi* neither discloses nor remotely suggests "a ball retrieving attachment attached to a shoulder of the racquet in ball retrieving position" of "a series of preshrunk nylon monofilament hooks... having a monofilament diameter great than 8.0 mil and an average hook height of at least 1.70 mm." which upon tangential contact with the tennis ball felt cover engages the pile and thereupon allows the ball to be lifted thereby. *Feldi* states unequivocally

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<sup>1</sup> Webster's New Universal Unabridged Dictionary Deluxe, Second Edition 1983

<sup>2</sup> Wilson Sporting Goods defines a tennis ball as having a wool pile cover

that the VELCRO monofilament hook materials of the type known and understood by *Feldi* do not work.

9. **FACT** - Two significant and material claimed limitations (i.e. tennis ball) *tangentially engaging and lifting a standard tennis ball* (i.e. wool pile) with a very narrowly defined and precise hooked material (Claim 1 diameter greater than .8 mil, average height at least 1.70 mm; Claim 10 diameter at least 8.0 mil, average hook height at least 1.85 mm; average width at least 1.0 mm; and average depth at least .6 mm and at least 250 hooks per square inch of spiral configuration arranged in repetitive rows “are neither disclosed nor remotely contemplated by *Feldi* or any other cited patent of record.”

10. **FACT** - Applicant’s results are completely unexpected in light of *Feldi*’s prior art teaching that a VELCRO hook material does not work and the need to completely replace the tennis ball pile covering with a VELCRO loop covering or vice versa.

11. **FACT** - An essential embodiment of *Feldi* is to change the ball covering to a VELCRO loop (or hook) material and, therefore, no longer be recognized as a tennis ball which definition precludes a ball having a VELCRO loop or hook covering.

12. **FACT** - The *Feldi* patent teachings cannot be applied against Applicant’s claims without first destroying the basic and novel teachings (i.e. replace wool pile covering with VELCRO), as well as the essence of the *Feldi* patent.

13. **FACT** - In combining the *Feldi* patent teachings with any of the other cited patents, an essential *Feldi* teaching must be totally disregarded and discarded, namely you must change the tennis ball cover to either a hook or loop VELCRO material which *ipso facto* renders the *Feldi* teaching inoperable and unfit for its intended function and purpose if, in fact, the cover remains unchanged.

14. **FICTION** - The final rejection assertion that the VELCRO hook material as defined and used by the *Feldi* is an equivalent to the narrowly defined hooked material as prescribed by Applicant's claims is legally and factually wrong. If it were, it would work.

15. **FACT** - Neither the ball retrieving attachment nor the hooked material as defined by *Feldi* perform the same function as Applicant's narrowly defined and unusual hooked material and, therefore, it cannot be regarded to be the equivalent to the claimed ball retrieving attachment or hooked material of Applicant's claims. The mere fact that a product brand is called a SCOTCHMATE does not render it *ipso facto* equivalent, since as shown by the Applicant's Affidavit, the SCOTCHMATE mushroom type fasteners do not work as well as most others.

16. **FACT** - Inherency cannot be presumed but must be proven by the prior art, not Applicant's contribution, M.P.E.P. 2112.

#### **Musslin Facts**

1. **FACT** - The teachings of the *Feldi* patent (filed December 27, 1987 and patented May 30, 1989) rest upon technology known after the *Musslin* patent teaching and, therefore, *Feldi* summarizes the state of the known art as of the registration date (02/07/1986) of the *Musslin* patent. (i.e. VELCRO or any other monofilament hooked materials will not tangentially engage and lift tennis balls.)

2. **FACT** - The *Musslin* patent fails to provide any information as what constitutes a suitable cloth (wrapper) with hooks (including metal fastening threads) which may be used in the French patent.

3. **FACT** - The *Musslin* patent fails to provide any enabling teachings (i.e. 35 U.S.C. 112) so as to enable anyone of ordinary skill to make and use a non-enabling substance of the *Musslin* invention.



4. **FACT** - *Feldi* teaches that the VELCRO hook materials do not work
5. **FACT** - *Musslin* neither discloses nor remotely teaches use or Applicant's claimed ball retrieving attachment comprising "hooked fastener material having a series of pre-shrunk nylon monofilaments ... of ... "an average diameter greater than 8.0 mil and an average hook height of at least 1.70 mm (claims 1-9 ) or the method claim 10 limitation of an average:
  - height of at least 1.85 mm (also claims 4-8 and 10-15)
  - diameter of at least 8.25 mil (also claims 4-8 and 10-15)
  - hook width of at least 1.0 mm (claims 4-8 and 10-15)
  - depth of at least 0.6 (claims 4-8 and 10-15)
  - at least 300 hooks per inch squared (claim 9)
  - at least 250 hooks (claim 10)
6. **FACT** - *Musslin* leaves the artisan completely in the dark as to what works and what does not work which in light of the *Feldi* teachings indicates *Musslin* is nothing more than a paper conceptual patent leaving the artisan to a myriad of potential applications, as taught by both *Urwin* and *Feldi*, which don't work (without increasing significantly the surface area of contact) as evidenced by both the *Feldi* and *Urwin* patent teachings.
7. **FACT** - The essential elements of applicant's claimed ball retrieving attachment and hooked material are not disclosed by *Musslin*.

#### **Urwin Facts**

1. **FACT** - *Urwin* does not disclose the embodiments of applicant's invention, nor does *Urwin* teach that one would succeed through the means of tangentially contacting, engaging and lifting a tennis ball with the narrowly defined ball retrieving attachment of hooked materials as prescribed by applicants claims 1-15.

2. **FACT** - *Urwin* teaches precisely the opposite from Applicant's "tangential contacting" by stating that "a strip which follows the contour of the head of the tennis ball racquet has a curve diametrically opposite to the curve of the tennis ball, *meaning that only one small area of the strip can come in contact with the tennis ball, making it very unlikely that the ball can be grasped securely enough to be picked up.*" (for example, see Column, 2, Lines 1-10)
3. **FACT** - *Urwin* states that the most appropriate place "where the apparatus provides a means to attempt to grasp the tennis ball and that is at the butt end of the handle of the tennis racquet." (Column 1, Lines 61-64).
4. **FACT AND FICTION** - The Examiner's reliance upon Col. 4, lines 8-13 of *Urwin* is wrong since the cup shaped ball retriever **10** of Figure 3 includes a base having a VELCRO strip **24** which allows the cup shaped retriever **10** to removable attached to the VELCRO strip **30** referenced in Col. 4, lines 8-13. The VELCRO strip **30** of Figure 1 does not pick up the ball, but serves only as a mount for ball retriever **10** of *Urwin*..
5. **FACT** - The essence of the patented invention of *Urwin* relies upon increasing the surface area of hooked material contact with the tennis ball by providing a cup shaped retriever **10** which engages over a large portion of the tennis ball surface and thereby provides sufficient arcuate surface contact along almost one-half of the radial surface of the tennis ball pile so as to permit the tennis ball to be lifted thereby.
6. **FACT** - The applicant's claimed invention of tangentially contacting, engaging and lifting of the tennis ball cover with the unique claimed tennis ball attachment is completely contradictory to the ball encompassing teachings of *Urwin* and *Urwin's* clear teachings that such an approach would make it very unlikely to effectively grasp and pick up the tennis ball.
7. **FACT** - Applicant's claimed invention relies upon entirely different principles and mode

of operation from that disclosed by *Urwin*. (Cupping vs. tangential contacting and lifting.)

8. **FACT** - The cup shaped ball retriever of *Urwin* is an essential embodiment and teaching of the *Urwin* patent. Accordingly, it would be impermissible when relying upon *Urwin* to completely disregard the need and functional purpose of an encompassing cup which provides sufficient surface area so that the ball may be lifted and retrieved thereby.

9. **FACT** - Applicant's tangential contacting completely contradicts the engaging cup teachings of *Urwin*, and therefore, *Urwin* clearly teaches and directs the artisan away from the embodiments of Applicant's claims 1-15.

10. **FACT** - The invention as described by *Urwin* would be rendered inoperative by the replacement of the cup shaped ball retainer with the tangential contacting engaging and lifting embodiments of Applicant's claimed invention.

11. **FACT** - Applicant's tangential contacting and lifting embodiments are totally unexpected in view of *Urwin's* teachings.

### **Melbye Facts**

1. **FACT** - The *Melbye* mushroom type hook strip is not a "hooked fastener material having a series of preshrunk nylon monofilament hooks... characterized as having a monofilament diameter greater than 8 mil and an average height of at least 1.70 mm." Applicant's claimed hooked material is totally different, as clearly defined by claims 1, 4 and 6-15.

2. **FACT** - The *Melbye* (SCOTCHMATE) mushroom hook strip when applied as a hooked fastener does not work as clearly evidenced by Applicant's Rule 132 Affidavit.

3. **FACT** - The *Melbye* mushroom type hook strip is not an actual and obvious equivalent to the unique and distinctly unique monofilament nylon hook fastener materials as defined by Applicant's claim. (Equivalent must perform the same functional result.)

4. **FACT** - That the mentioned VELCRO AND SCOTCHMATE garment fasteners are not taught by *Melbye* as garment fasteners when the hook component is used in the absence of their tailor-made and mating loop fastener component.
5. **FACT** - *Melbye* neither teaches nor suggests any use of the hook component by itself.
6. **FACT** - Just because 3M classifies a host of different fasteners as being sold under the SCOTCHMATE label does not mean that all SCOTCHMATE products are the actual and obvious equivalent to one another as evidenced by Applicant's 132 Affidavit.
7. **FACT** - To apply *Melbye* as a 103 reference would require a total disregard of the essence of the *Melbye* patent, (i.e. replace the mushroom type fastener with an unrelated and completely different monofilament fastener of totally unrelated hook characteristics.)

#### **Smerdon Facts**

1. **FACT** - *Smerdon* does not disclose the embodiments of applicant's invention, nor does *Smerdon* teach that one would succeed through the means of tangentially contacting, engaging and lifting a tennis ball with the narrowly defined ball retrieving attachment embodiments of a one-of-a-kind hooked material as prescribed by applicant's claims.
2. **FACT** - The *Smerdon* patent teaches the essential need to adhesively wrap an extra width of mating hooked fasteners material **94** about the bicycle stem and a mating or matched loop fastener material **96** adhesively wrapped about a beverage tube at a position so that a cyclist may drink from the beverage tube by detaching and then reattaching by fastening the mating hooked **94** and lopped **96** fasteners together.
3. **FACT** - *Smerdon* pertains solely to a hook and loop fastener combination used conjointly for their intended purpose.
4. **FACT** - *Smerdon* does not remotely teach or suggest that either hook and loop fastener

combination of SJ3526 or SJ 3527 industrial fasteners can be used separately from their intended use solely as a hook and loop fastener combination much less the hooked material can be used to tangentially lift grounded tennis balls.

5. **FACT** - By separating the hooked material from the looped material of the SJ 3526 and SJ3527 industrial fastener combination from the *Smerdon* patent teachings, the *Smerdon* patent teaching as applied in the final rejection renders the *Smerdon* patent teachings inoperable for their intended purpose and function (i.e. the hook material was never intended by *Smerdon* to function or be used by itself).

6. **FACT** - There exist a myriad of potential fasteners amongst the hook and loop fasteners of which there exists not the slightest scintilla of substantive teachings in *Smerdon* that the hook fastener material by itself may be used to effectively and uniquely amongst all others to tangentially lift with unexpected superior tenaciousness all major tennis balls.

7. **FACT** - *Smerdon* bears no relevancy to the unexpected superior hooking and lifting capacity of applicant's attributes as claimed and disclosed in applicant's application.

### **EQUIVALENCY FICTION**

1. **FACT** - Applicant has never acquiesced or stated that the ball retrievers disclosed by the prior art are the equivalents (actual and obvious) to Applicant's ball retriever attachment of the hooked monofilaments of the highly specified structure and characteristics as prescribed by Applicant's claims.

2. **FACT** - Applicant's Rule 132 Affidavit refutes in total the Examiner's unwarranted and unsubstantiated assertion that all SCOTCHMATES and all fasteners are the actual and obvious equivalents to one another including Applicant's unique ball retriever attachment..

3. **FACT** - Contrary to the Office Action's assertion, there exists a host of different types of

fasteners which heretofore were recognized by the art of record as incapable of tangentially engaging and lifting a tennis ball therewith, and that pursuant to these prior art teachings, tennis ball lifting efficacy could only be accomplished by increasing the contacting surface in a cup-wise fashion so as to provide sufficient contact with the ball so as to permit the hook fasteners to lift the ball thereby (*Urwin*) or by changing the ball to a hook or loop covering (*Feldi*).

4. **FACT** - Equivalency is clearly refuted by the cited art of record which clearly states that the VELCRO fasteners as used and applied by the prior art were incapable of providing the unexpected tangential contacting engaging and lifting attributes of Applicant's ball retrieving attachment of claims 1-15. As a general rule, SCOTCHMATE fasteners of the VELCRO type do not work. The uniqueness of the Applicant's ball retrieving attachment of precise monofilament fiber hook character as claimed herein provides a totally new and unexpected result within an art background consistently believing that it could not be done.

5. **FACT** - If none of the references of record disclose or define a ball retrieving attachment with a monofilament hooked fastener as uniquely claimed herein which uniquely permits tangential contacting and lifting of a tennis ball therewith, there cannot be any equivalency when, in fact, all of the references relied upon failed to disclose these unique embodiments of Applicant's invention in sufficient detail so as to enable anyone of ordinary skill to make and use Applicant's invention.

6. **FACT** - Equivalency cannot be predicated upon an unexpected and unique function totally absent from all other functions relied upon and alleged to be equivalent.

#### **NO PRIMA FACIE CASE OF OBVIOUSNESS EXISTS**

The 35 U.S.C. 103 rejection of record disregards the obviousness patentability guidelines as set forth in Chapter 2100 of the M.P.E.P.. The final rejection appears to rely upon a mystical

alleged factual conclusion that just because a SCOTCHMATE is known, then all fastener combinations amongst a vast number of different selections from a wide array of potential sources would be obvious to one of ordinary skill. In essence, the final rejection rests upon a host of speculative assumptions which in effect have nothing to do with the problem confronting the applicant and the prior art or what the prior art teaches, all of which, in turn, disregards the well established requirement of analyzing the subject matter as a whole. Before there can be any resolution whatsoever of the 35 U.S.C. 103 rejection, it is imperative that the invention as a whole, and not some part of it, must be obvious. *In re Antonie*, 559 F.2d 618, 620, 195 USPQ 6,8 (CCPA 1977). The claimed subject matter, as a whole, includes tangentially contacting and lifting a conventional tennis ball (which, *ipso facto*, includes the tennis ball felt covering) with a highly specified ball retrieving attachment equipped with a one-of-a-kind monofilament nylon hooked material defined by its one-of-a-kind characterization.

To establish *prima facie* obviousness of a claimed invention, **all the claim limitations must be taught or suggested by the prior art**, as stated in M.P.E.P. 2143.03. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art.” “*In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is non-obvious under 35 U.S.C. 103, then any claim depending therefrom is non-obvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).”

Clearly, the only basis for alleging all of the claimed limitations of Applicant’s claims have been met by the prior art rests solely upon a totally unsupported allegation that the Applicant has admitted equivalency to the highly specific and precise ball retrieving attachment of claimed hooked fasteners herein to those taught by the prior art as relied upon in the 350

U.S.C. 103 rejection. Applicant strenuously objects to such a strained and totally unwarranted conclusion that the Applicant has admitted equivalency between the claimed subject matter of this invention and the prior art. It does not exist. There is no support for such an unfounded assertion and it should be withdrawn for total want of factual and legal justification. Within a somewhat analogous situation the M.P.E.P. under section 2401.02 recognizes this fallacy by stating,

“The prior art did not recognize that treatment capacity was a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result-effective variable. The prior art did not recognize and, in fact, failed to teach the very limited and highly specific parameters of the hooked materials (as a whole) as claimed herein by the Applicant would lend to a totally unexpected result precisely opposite from what the cited patents teach.”

Again, the Applicant reiterates the fact that the characterizations of the ball retrieving attachment and monofilaments as precisely claimed herein are totally absent from anything cited or made of record by the Examiner in the 35 U.S.C. 103 rejections herein. In fact, the equivalency as alleged to be established by the *Melbye* patent is completely inoperable when applied to the tangential contacting and lifting requirements of Applicant's invention, which fact remains irrefuted and clearly substantiated by Applicant's Rule 132 Affidavit. Under the patentability requirements of 2141.02 it is stated, “A prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). The *Gore* decision acknowledged this by holding that a reference teaching rapid stretching of conventional plastic polypropylene with reduced



crystallinity combined with a reference teaching stretching unsintered PTFE would not suggest rapid stretching of highly crystalline PTFE, in light of the disclosures in the art that teach away from the invention, i.e., that the conventional polypropylene should have reduced crystallinity before stretching, and that PTFE should be stretched slowly.”

### **PRIMA FACIE OBVIOUSNESS MUSTS**

Section 2143 of the M.P.E.P. makes it succinctly clear that three basic criteria must be met in order to establish a *prima facie* case of obviousness. It is unequivocally clear herein that these three basic criteria have not been met. These criteria are as follows:

“To establish a *prima facie* case of obviousness, three basic criteria must be met. **First, there must be some suggestion or motivation**, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, **to modify the reference or to combine reference teachings**. **Second, there must be a reasonable expectation of success**. **Finally**, the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. All of these elements are lacking in the Final Rejection.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).” Only Applicant’s claimed invention herein unlocks the inoperability of the prior art endeavors.

The final rejection appears to rest upon the premise that references may be arbitrarily combined by simply randomly gleaning discordant teachings from each of the cited references and then forcibly combining those discordant teachings (notwithstanding clear teachings otherwise) in such a manner so as to meet the claimed limitations of Applicant’s invention. Unfortunately, even when all this is done, there is still lacking a teaching reference or patent

teaching of the unique ball retrieving attachment of precise monofilament hook characteristics of Applicant's claims which for want of any other justification is assumed to be equivalent because the Applicant allegedly admitted equivalency. References can only be combined if there exists a suggestion or motivation in the references to do so, M.P.E.P. 2143.01.

**FACT THAT REFERENCES CAN BE COMBINED OR MODIFIED IS NOT  
SUFFICIENT TO ESTABLISH *PRIMA FACIE* OBVIOUSNESS**

The final rejection clearly falls within the ambit of: "A statement that modifications of the prior art to meet the claimed invention would have been " 'well within the ordinary skill of the art at the time the claimed invention was made' ... " because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See Also *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references.)"

Applicant has taken great care to point out above, as well as in Applicant's previous response that, "If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)..." (N.B. *Urwin*, *Feldi*, *Musslin*, etc.)

Chapter 2100 of M.P.E.P. also makes it explicitly clear that when references are combined with one another so as to modify a reference, then the proposed modification cannot change the principle of operation of the modified reference. Clearly, the manner in which the

references have been applied against Applicant's claims must necessarily change the principle of operation of the reference so that it no longer functions in its intended manner. (e.g. *Feldi, Urwin and Melbye*).

The decision *in re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) is pertinent in that therein the claims were directed to an oil seal comprising a bore engaging portion with outwardly biased resilient spring fingers inserted in a resilient sealing member. The primary reference of *Ratti* relied upon in a rejection was based on a combination of references disclosing an oil seal wherein the bore engaging portion was reinforced by a cylindrical sheet metal casing. The *Ratti* patentee taught the device required rigidity for operation, whereas the claimed invention required resiliency. It is rather interesting that the Court of Customs and Patent Appeals, in reversing an Examiner's obviousness rejection, held that the suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operation. The final rejection herein rests upon the same fallacy.

As pointed out previously, Section 2143.03 requires that all of the claimed limitations must be taught or suggested by the prior art. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Similarly, 'all words in a claim must be considered in judging the patentability of that claim against the prior art.' *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is non-obvious under 35 U.S.C. 103, then any claim depending therefrom is non-obvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)."

Lastly, there has not been any consideration whatsoever given to the secondary objective evidence of record. Section 2141 requires that “OBJECTIVE EVIDENCE MUST BE CONSIDERED. Objective evidence or secondary considerations such as unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, and skepticism of experts are relevant to the issue of obviousness and must be considered in every case in which they are present. When evidence of any of these secondary considerations is submitted, the examiner must evaluate the evidence of Section 2141.”

### **Additional Insights**

The final rejection involves a creative reconstruction of the prior art in a manner completely contradictory to the very references relied upon. The reliance upon Applicant’s admission of equivalency is factually and legally wrong. The mere fact VELCRO and SCOTCHMATE may be regarded as hook-and-loop fasteners does not mean that equivalency exists. On page 3, paragraph 2 the Office Action wrongly concludes equivalency upon *Melbye*’s Col. 1, line 15-18 teachings of “widely used garment fasteners are hook-and-loop fasteners such as currently marketed under the trademark VELCRO by VELCRO U.S.A., Inc., and under the trademark SCOTCHMATE by 3M Company.” The Office Action misses the whole point of the doctrine of equivalency meaning that actual and obvious equivalency does in fact exist. Actual equivalency means that they function in the same manner to produce the same result. The product as defined by *Melbye* may be a SCOTCHMATE which, as clearly stated in Applicant’s Rule 132, is neither the actual or obvious equivalent of the highly unique and specialized monofilament hooked material as prescribed by Applicant’s claims. **It does not work, it does not function.** None of the teachings of record remotely disclose or contemplate the untaught embodiments of Applicant’s invention. Obviousness cannot be predicated upon what is

unknown and uncited. Neither *Musslin*, *Urwin*, *Feldi* nor *Smerdon* disclose or suggest that VELCRO or SCOTCHMATE may be used to tangentially contact and lift a tennis ball. If you modify the ball so it either contains VELCRO hooks or loops instead of the tennis ball felt cover so the combined hook or loop lifts the ball or to more completely encircle or cup the ball (*Urwin*), then it will work, BUT neither of these embodiments constitute Applicant's claimed invention.

The reliance of column 4, lines 8-13 that "the hook fastener may be placed anywhere along the outer surface of the racquet frame" of *Urwin* arises from a failure to read *Urwin* for what it teaches. The VELCRO strips mentioned in Col. 4, lines 8-13 refer only to the placement of hook and loop strip onto which the cupped shaped ball retrieving attachment **10** or "arcuate shaped gripping member **40** is removeably affixed to the gripping means by gripping means **24** which are hook VELCRO fastener." As stated, "the tennis ball fits snugly within the interior of arcuate shaped gripping member **10**." The gripping means **10** as shown in Figure 3 of *Urwin* may be attached anywhere where there is a fastening strip for it to be attached. One should read and understand the patent's teaching before choosing a passage which bears no relevancy to what the patent teaches as a whole.

Accompanying a previous response in the parent application was a copy of a response received from Wilson Sporting Goods which should put an end to the Office Action's strained construction "that the claims do not preclude changing the tennis ball pile." If that were done as taught by *Feldi*, it would no longer be a tennis ball. For whatever reason, the Office Action deems it necessary to reject Applicant's claims based on conclusions which are contrary to the very patent teaching relied upon. Applicant respectfully requests an examination of each of the patent teachings, as a whole, and not by a random gleaning of only those isolated and disjointed

teachings which support a rejection at the exclusion of those teachings needed to understand what the art fairly teaches and suggests to the artisan.

There exists no factual basis under 35USC103 to reject Applicant's claims 1, 4 and 6-15 herein. The final rejection recognizes the want of such facts and attempts to rely upon erroneous conceptions to provide what is factually and legally wanting. The M.P.E.P. guidelines as to what constitutes a proper 35 U.S.C. 103 rejection has not even been taken into account. The final rejection is **WRONG**. Applicant's claimed invention is truly unexpected and patentable since the very art relied upon by the Examiner in the final rejection clearly states it cannot be done.

The final rejection fails to take into account what the cited patents of record actually teach and suggest to one of ordinary skill. Each of the cited patents have been selectively and randomly gleaned for only those terms which may bear some sort of semblance towards applicant's claimed invention in total disregard and disrespect as to what each patent teaches the ordinary artisan as a whole. In combining the patent teachings under 35USC103(a) in the final rejection, essential elements or component parts necessary to the operability of each patent have been summarily disregarded. Assumptions and speculative conclusion unfounded in fact and often contrary or in complete disregard of context in which they have been made supply the entire rationale for the final rejection. The strained illogic of the final rejection is self evident by the conclusory statements made in the final rejection of August 11, 2005 of:

1. Feldi discloses the combination of a tennis racket equipped with a ball retrieving attachment attached to the shoulder of a racquet wherein the ball-retrieving attachment can be a hooked fastener material such as VELCRO when in fact Feldi requires "a tennis ball specially covered in a loop fastener material (see U.S. Patent No. 6,652,397 B1 to Lamson) which specifically mates onto the mating hooked material as any other mating

hook and loop fastener combination. Absent the mating loop fastener covered tennis ball, the hooked material by itself (as taught by Feldi) possess no capacity to engage and lift an ordinary tennis ball. What applicant has accomplished in completely contrary and unexpected in view of what Feldi teaches the ordinary artisan. Feldi teaching of any hooked material in the absence of tennis ball covered with a mating looped material is meaningless and involves the highest order of speculation without any factual support as required under 35USC103(a).

2. Musslin is a discredited foreign patent which as acknowledged by the Board of Appeals teaches nothing germane to applicant's claimed invention.
3. Melbye teaches garment fasteners consisting of the hook and loop combination.
4. Smerdon teaches a mating combination of a hook fastener and a loop fastener each of which is essential so as to fasten together the watering tube to the bicycle stem with the hook and loop fastener combination such as SCOTCHMATE or any other fastener combination.

#### **Lamson Patent - Status Prior Art**

Applicant's attorney has been deeply troubled a recent uncovering of the enclosed U.S. Patent No. 6,652,397 B1 to Lamson. The Lamson patent was filed after applicant's parent application and names Raleigh W. Chiu as the Primary Examiner. Applicant's attorney courtesy directs the Examiner's attention to Background of the Invention teachings of Col. 1, 2 and 3, lines 1-14 and requests that the Examining Attorney carefully review Lamson's extensive and comprehensive review of the state of the art as it existed at the time that the Lamson patent application was filed (i.e. May 17, 2002). The Lamson patent clearly substantiates applicants position that it would be unobvious to expect any hooked fastener by itself to be capable upon

tangential contact of effectively lifting all major tennis ball brands much less being capable of lifting a tennis ball exhibiting a four fold weight increase.

What Lamson concludes as to the state of the art does not deviate from what applicant has disclosed and profusely argued before this tribunal and the Board of Appeals. Noteworthy amongst the prior art teachings of Lamson are the following:

- a) The number and diversity of devices spawned in the attempt to fulfill this need demonstrate both the long felt need for a solution, and the nonobviousness of the solution presented by the subject invention (namely using the hook and loop adhesive backing of a fastened together) conjointly so the sticky adhesive backing of the loop fastener or hook fastener may stick to the tennis ball pile.
- b) Previous fastener systems been as designed to retrieve tennis balls with a player's racquet have major or serious drawbacks. U.S. Patent No. 3,874,666, April, 1975 Ross, uses a hook material (ex. VELCRO) affixed to the end of the tennis racquet. This system does not retrieve tennis balls reliably because a tennis ball's standard covering, especially when worn, is not effectively adhered by the hook element of a hook and loop fastener system.
- c) U.S. Patent No. 4,834,393, May, 1989, Feldi, uses a strip of hook material attached to the tennis racquet by its adhesive tape backing and a tennis ball specially covered in loop fastener material. The drawback of this system is that it requires a specially designed tennis ball, increasing expense, decreasing the flexibility of use of the system, and intruding on play by introducing a ball with unusual flight characteristics.
- d) After an extensive and exhaustive review, these designs are of doubtful effectiveness because hook material will not securely grasp all tennis balls.



- e) U.S. Patent No. 4,993,712, February, 1991 Urwin, is difficult to apply, requiring careful aim to retrieve the ball.
- f) Previously attempted solutions have been plagued by elaborate and expensive design, intrusion on play, aesthetic obtrusiveness, and ineffectiveness.

Lamson recognizing that as commonly understood by the art, hooked fasteners in the absence of the mating loop fasteners (such as suggested by Feldi) or such as by a significantly increased cupped surface area of contact (Urwin) are ineffective in retrieving a tennis ball. Lamson's solution comprises a strip of double sided adhesive material, such as double sticky tape having a first adhesive side attached to the piece of sports equipment and a second adhesive side outwardly exposed to form an exposed adhesive surface for picking up the sports objects, in this case, regulation play tennis balls. How, when the very art that Examiner Chiu examined after examining applicant's parent application, can the United States Patent and Trademark Office now conclude that there existed any known hooked material which could effectively retrieve with unexpectedly superior efficacy all major brands of tennis balls when in fact the Examining Attorney should or ought to have known it was not feasible as clearly stated by Lamson? Why when, all other patents state it is not possible should one of ordinary skill seek a solution amongst hooked materials much less a highly specific and limited monofilament hook which because of its unique physical and compositional make up possesses a unique and isolated ability to retrieve all major brand tennis balls? Why should it be obvious to discover on unexpected superior efficacy amongst a host of all hooked materials notoriously known to be ineffective? The applicant is required to make a full and complete disclosure of all relevant art to the United States Patent and Trademark Office. By the same token, the Examining Attorney owes an ethical responsibility to not make speculative and unfounded factual assertions which are completely contrary to the very

art which the Examining Attorney is responsible to administer. The facts of record are clear and require fair play.

**Prior Art as a Whole**

The final rejection fails (as in the parent application appeal) to apply the 35USC103(a) standards as commanded by the MPEP to be followed in the fair and unbiased examination of any patent application is entitled to receive and the well-established case law. The final rejection clearly:

- 1) fails to recognize the actual factual background of the prior art as existed at the time of the effective filing date;
- 2) fails to properly assess what each patent fairly teaches and suggest to the ordinary artisan;
- 3) fails to resist the hind-sighted temptation of isolating certain teachings from any cited patent and then to apply the isolated teachings in a manner completely out of context in which the respective patent teachings are found;
- 4) reads and interprets each patent as a glossary for applying disclosed elements in a manner totally out of the context in which they are found;
- 5) modifies or eliminates crucial elements and essential combinations taught by the respective patentees so as to destroy the basic and novel teachings of the patent or render it inoperable for its intended purpose;
- 6) fails to comprehend or understand that when patentees teach or disclose the use of specially manufactured mating hook fastener and loop fastener combinations designed specifically to mate and fasten together that such teachings do not extend to the use of the hook fastener by itself without the cause of the specifically designed and tailor-made mating loop fastener;

- 7) the field of hook and loop fasteners encompasses a broad array of diverse fasteners, produced by a host of manufacturers involving a myriad of physical and chemical processing procedures which can dramatically change the function and character individually of the hook component and the loop component as well as the fastening interplay between the tailor made hook and loop fastener combination and their intended use as mating fastening partners;
- 8) fails to understand that when a cited patent teaches and suggest the conjoint use of fastener combination such the Smerdon combined use of SJ3526 SCTOCHMATE for fastening together a water tubing to a bicycle handle bar stem that Smerdon does not teach that only the hook fastening unit should be used by itself;
- 9) the doctrine of equivalents does not apply to a one-of-a-kind monofilament hook material defined and claimed very precisely which possess unexpectedly superior retrieving characteristics saliently distinctive from all other hooked materials which as notoriously recognized by the art of record do not possess such a property;
- 10) when the patent literature clearly teaches the inability or inoperability of the commonly known hooked materials to effectively retrieve grounded tennis balls, the fact that applicant discovers a unique and one-of-a-kind hooked material which unexpectedly works represents the antithesis of obviousness under any 35USC103(a) standard;
- 11) there exists no expectation on the basis of fair reading of the prior art as a whole to expect any hooked material (about some sort of extrinsic aid) would possess an outstanding ability upon tangential contact to not only all major tennis ball brands but to lift a four fold weight of the tennis ball;
- 12) that if the art teaches the futility of well established and known findings and that if one discovers an unexpectedly superior efficacy by doing something the prior art consistently teaches

cannot be done, there exists under any patentability standards an obvious invention;

13) Equivalency does not exist between alleged equivalent materials which are actually different in structure, composition and function.

The entire thrust of the final rejection rests upon the common premise that all hooked materials or elements of a hook and loop combination are equivalent and therefore should lead to the inescapable conclusion that any hooked material will effectively serve to tangentially lift any tennis ball and therefore the unique claimed characteristics of applicant's monofilament element is an in-material claimed limitation. If this were true, why was it necessary for Feldi to solve the inability of the hooked material by themselves (e.g. the hooked material of the VELCRO hook and loop fastening system) and thereby cover the tennis ball with the modified VELCRO loop fastener so that the hook then would effectively engage and lift the modified tennis ball? Why was it necessary for Urwin to create a cup to cup the tennis ball so that it could then engage and lift the tennis ball from a grounded position? When Urwin mentions hook type VELCRO members, why was it necessary to create a cup so that the ineffective VELCRO hook member could then lift a tennis ball? Why does the cited Musslin patent (other than vague generalities and innuendos) fail to identify any workable "adhesive (sticking) hook"? Why do countless patents (e.g. Feldi, Urwin, Hodges - Des 355,232) issuing after Musslin (i.e. 1987) all conclude that a hooked material by itself without substantive auxiliary support are ineffective? Why in light of this consistent prior art discouragement should applicant discover her invention when all others failed? Why do all of the patentees within the last decade or so collectively teach that hooked materials alone will not work and all teach the use of an auxiliary element which overcomes the inherent deficiency of the hooked material? Why is it necessary for the Examiner to rely upon "back door teachings" which require intuitive speculative extrapolations in order to

allegedly form a basis for a 103 rejection when in fact the clear teachings of all of the enabling patents teach that what applicant has done cannot be done? Why does it become necessary to rely upon adhesive backing of VELCRO and SCOTCHMATE hook and loop fasteners when in fact the adhesive backing bears no relationship or interaction with the claimed tangential contact and lifting of a tennis ball?

The final rejection reaches the preposterous conclusion that VELCRO and SCOTCHMATE are art recognized equivalents and then erroneously concludes that all hooked fasteners are equivalent to one another. As the Board of Appeals concluded and as stressed by applicant's attorney, the VELCRO and SCOTCHMATE referenced by Melbye are standards "widely used as garment fasteners and hook-and-loop fasteners" which means a hook and loop combination of paired and manufactured paired hook and loop fasteners which serve as garment fastener. The Melbye teachings have nothing to do with the hook fasteners by itself but only the paired hook and loop combination which are used as garment fasteners. Melbye clearly illustrates the failing in attempting to group all fasteners together. The assignee of the Melbye patent is 3M who also markets its fasteners under the SCOTCHMATE mark. The Melbye patent (assigned to 3M) does not even pertain to the claimed monofilament hooked fastener component of applicant's invention but rather relates to a mushroom type hook fastener which under the rationale of the office action would also be considered to be art recognized equivalent. The reliance upon the complete unenabling and art acknowledged discredited teachings of Musslin constitutes nothing more than hind-sighted reconstruction of the prior art solely because applicant's own invention provides the sole enabling reason for doing so. The Office Action admits that none of the cited 103(a) patents disclose the recited one-of-a-kind monofilaments of the claimed hook material. By arguing tennis is an out-door sport and that the Wimbledon and

U.S. Open are out-door events “played in wet and warm conditions” (interesting to note that both the Wimbledon and U.S. Open events are perfunctory postponed when it rains) and since Smerdon teaches that SCOTCHMATE™ SJ3526 fastener (used as a hook and loop fastener combination) in wet (e.g. water tube) it naturally follows it cannot be used in Feldi (note Feldi requires a loop ball) or the discredit and non enabling Musslin patent teachings.

The final rejection by its erroneous application reveals that the rejection of applicant’s claims requires applicants own teachings to make any sense of the randomly gleaned and isolated teachings of the cited patents. Wet and humid conditions have nothing to do with the astounding and unexpected embodiments of applicant’s invention. All of the patents pertaining to tennis ball retrieval are concerned about the innate inability to pick up a grounded tennis ball.

Smerdon only teaches the adhesive backing properties of the SJ3526 fastener combination. The Smerdon patent neither discloses nor teaches anything other than adhesive backing characteristics of hook and loop fastener combination. Smerdon is silent as to the character and function of the monofilament hooked material other than it could be used in combination with the looped material to secure or fasten a water tube loop material to the bicycle handlebar stem hooked material.

There exists no factual or legal basis to conclude that just because VELCOR & SCOTCHMATE hook and loop fasteners are garment fasteners when used as a hook and loop fastener, that all VELCRO & SCOTCHMATE hook fasteners are equivalent to one another. Such an absurd conclusion is neither supported by the facts of record nor the controlling case law on the doctrine of equivalents. In no form or manner does any hook material function in the same manner to produce the same result as hook fastener and loop fastener combination. As clearly taught by each of the references including Melbye, Feldi and Smerdon, the hook fastener

component does not perform any effective fastening functionality without coactively engaging its mating and specially manufactured loop component. The SCOTCHMATE SJ3526 (as taught by Smerdon) only completes its intended fastening function when both the loop fastening component and hook fastening component are used as a fastening component combination. No equivalency extends beyond the combination of both the hook and loop fasteners together. There is factual and legal error to conclude that all hooked fasteners are equivalent to one another. This is obviously not true since applicant's own teachings when viewed in light of the Feldi, Melbye, Urwin, Ross and Lamson patent teachings clearly reveal that the hook fasteners are not the actual and obvious equivalent to one another.

The final rejection relies upon the alleged improved adhesive characteristics of the looped material of SCOTCHMATE SJ3526 fastener in adhering to a wet water tube when used in combination with the mating hooked material attached to the bicycle handlebar stem.

Allegations that tennis is an outdoor sport that both the Wimbledon and U.S. Open are outdoor events played in wet and warm conditions elucidates the extent factual matters are distorted to support any given hypothetical position. Anyone witnessing the U.S. Open and Wimbledon are well aware that these events are postponed when the tennis court is wet. Neither event is played in the rain. To equate a wet watering tube to a postponed event because of rain seems rather far fetched.

Assuming Arguendo that all of the aforementioned major equivalency obstacles were overcome, the prior art of record as a whole would not permit the combination of references under 35USC103(a) on the grounds set forth in the final rejection. In combining any secondary reference with a primary reference, there must exist a reasonable expectation of success. In view of the prior art as a whole, how can there exist a reasonable expectation of success when all of

the enabling patents of record (namely Feldi, Urwin, Norton, Schubert, Ross, Lamson including all the patents cited in the Background of the Invention) all resoundingly teach the ineffectiveness of the hooked material in lifting all major tennis ball brands upon tangent contact and lifting? An evaluation of the invention as a whole under 35USC103(a) includes the unexpected results of the invention. There exists no expectation whatsoever that a hooked monofilament meeting the one-of-a-kind highly specific claims specifications could tangentially lift all major tennis ball brands to the amazing extent of 3 times the tennis ball weight when all other known hooked materials were knowingly ineffective by themselves as astoundingly taught by the art of record. Applicant's position as stated in the appeal brief in the parent application is very germane to the issues herein. Obviousness cannot be predicted upon the unknown or the unexpectedness both of which are clear indication of unobviousness.

The final rejection relies upon applicant's own findings including the undisclosed hook width, depth, diameter and density as a basis for rejecting applicant's claims 1, 4 and 6-15. As aptly pointed out by the Board of Appeals, none of the reference teach or suggest that hook size (i.e. monofilament diameter, hook height, hook width and hood depth) are of particular concern or essential to effective tangential engaging and lifting a grounded tennis ball. Musslin (as noted by the Board of Appeals) "provides no indicator that hook size is of concern or of importance and merely suggests that any hook material which is capable of sticking on the tennis ball would be adequate" without any enabling teachings. Smerdon fails within the same pitfall as all of the other references in that there exists no teachings or suggestions that the hook size of the monofilament hooking material is an essential embodiments to effective tangential lifting of a grounded tennis ball.

One skilled in the art would not have found it obvious to substitute the 3M



SCOTCHMATE SJ3526 and SJ3527 industrial fastener disclosed by Smerdon for the Fastener disclosed by Smerdon for the fastener disclosed shown by Feldi or Musslin. Feldi requires a racket and a tennis ball cover equipped with the hook fastener and the loop fastener combination. To dissect or exclude for example the SJ3526 or SJ3527 looped tennis ball cover from the combined teaching constitutes clearly an improper reference combination under 35USC103(a) as clearly stated in the MPEP and controlling case law.

Applicant's attorney respectfully requests the Examining attorney to make of record probative proof substantiating his position that an ordinary artisan may legally conclude that the fastening hooked component is an obvious equivalent of a hook and loop fastening combination. Applicant further specifically requests that the Examining Attorney to substantiate any claim that all hook fastening components may be fully functional upon all substrates including foreign substrates other than their intended usage with their mating loop material.

The mere fact the Smerdon notes that the pressure sensitive adhesive backing used in the fasteners should maintain good adhesion in wet and warm conditions would also suggest that the hook and loop material would have to ably perform in such conditions bears no relevancy to the facts of record or the applicable case law. The record clearly establishes (as the Examiner should well know by his examination and allowance of U.S. Patent No. 6,652,397 B1 to Lamson) that there exists no known hooked material before applicants invention which by itself without some other auxiliary support possess a capacity of effectively engaging and tangentially lifting all major brands of grounded tennis balls. Notwithstanding the non-enabling and unsuggestive and discredited Musslin teachings, all of the other patents of record clearly state that all of hooked materials are ineffective. The art of whole, as the Examiner knows, applies to any proper examination of this application under 35USC103(a).

The final rejection appear to conclude that if you assume all hooked materials may be regarded as being equivalent, that by reason hooked materials are mentioned as a part of a hook and loop fastener combination that then the hooked material may ipso facto be used for fastening purposes with any substrate other than its intended function with its mating loop material, that in patents requiring a hook and loop fastening combination that the loop fastening component may be replaced with any other substrate for fastening purposes including a tennis ball which as taught by all of the creditable references as being ineffective and non-engaging and therefore an unsuitable fastening substrate.

The Examining Attorney notes that the claims do not preclude a ball having the Smerdon loops. This argument has no merit. Applicant courtesy directs the applicants Exhibit E, pages E-1 to E-18 of Applicant's Appeal Brief and applicant's remarks in the first full paragraph on page 21 of appellant's appeal brief reply the parent application.

The rational of the paragraph bridging pages 6 and 7 involves the highest order of hindsight reconstitution of the prior art strictly in view of applicant's own teachings. The alleged inherency argument is based strictly upon speculation in complete disregard as to what the art fairly teaches and suggests to the ordinary artisan. What the Examiner proposes by the rationale of the final rejection is to do precisely what the prior art, as a whole, fairly teaches as an exercise in futility.

Why would one skilled in the art attach another hooked material to a tennis racket when all of the meritable art teachings of record say that it will not work? How could one skilled in the art believe that there existed any chance of success when all of the meritous patent teachings teach that it is doomed for failure? What purpose other than the highest order of speculation would ever prompt a skilled artisan to do what the Examiner proposes in light of patent teachings

which conflict and teach precisely the opposite from what the Examiner speculatively concludes?

The Office Action appears to rely upon an inherency argument that if one skilled in the art would engaged in a number of hypothetical extrapolations which, in effect, negate and propose precisely contrary to what the prior art as a whole teaches, the artisan would inherently produce applicant's claimed invention. In response to this erroneous position, it should be noted that inherency cannot be presumed under 35USC103(a) but must be proven.

There exists a dual duty by the United States Patent Office and a registered patent attorney practicing before the patent office to be candid and truthful in all matters and proceedings before the patent office. The comments bridging pages 11 and 12 reflect an accurate account of what transpired during a telephonic contact with United States Patent Office representative named in the final rejection of the parent application. The undersigned in the final rejection of this application was not that person.

As mentioned in applicant's last response, applicant's responses in the parent application including applicant's appeal brief, applicant's reply brief and the decision of the Board of Patent Appeals and interference appeal No. 2004-2020 and applicant's prior response are incorporated in and made a part of this response. As stated by the Board of Appeals, there exists nothing in Urwin which overcomes the deficiencies of the other references relied in the 35USC103(a) rejection. As clearly taught in applicant's background in the invention of applicants parent application, applicant's parent application appeal brief and reply brief and as verified in the background of the invention teachings of the enclosed Lamson Patent, a hooked material pursuant to Urwin must be positioned within a cupped member in order to cup and lift a tennis ball. Tangential contact and lifting of the tennis ball is not feasible for which the cup fastener of Urwin was designed to overcome. As with the Feldi ball having a new loop cover, any

combination with any other reference cannot exclude the essential cupping feature of Urwin.

In practicing the claimed embodiments of applicants claim's 8, 11 and 13-15, does one of ordinary skill when fairly appraising the respective patent teachings disregard:

- 1) The essential ball covered with a mating loop fastener so that the mating hook fastener attached to the racquet can effectively retrieve a tennis ball (to eliminate a component renders the patent inoperative for its intended use and function);
- 2) Eliminate the essential hooked material placed within a cupping member adopted to cup a tennis ball (essential to the basic and novel feature of Urwin and its operability and function);
- 3) Segregated the essential loop material from the hook material in the Smerdon bicycle watering tube and bicycle handlebar stem combination;
- 4) Disregard Feldi and Urwin and apply to Musslin a feature which is discredited by all of the reference of record including the Lamson patent which was examined and allowed by the Primary Examiner of record;

all of which constitute a complete disregard of what is required in combining references under 35USC103(a).

### **Method Claims 10-15**

As to the rejection of applicant's method claims 8-15, the 35USC103(a) rejection rests upon purely speculative inferences based illogical conclusions which in essence contradict the patent teachings as a whole.

Method Claims 10-15 have not been rejected upon any prior art which suggests or motivates the artisan to modify the references as proposed in the Office Action (must totally revamp the patents to eliminate essential teachings so that each patent teaching functions totally

different, such as cup of *Urwin* or replace the wool tennis ball pile with a nylon fastener of *Feldi*<sup>3</sup>), especially in light of explicit teachings stating that what the Applicant has done will not work (e.g. reasonable expectation of success)<sup>4</sup>.

Then there exists the remaining *prima facie* criteria that the prior art references (not Applicant's teachings) must teach and suggest all the claimed limitations.<sup>5</sup>

There exists hundreds of different patents relating to a host of different types of fasteners, including those of a pedestal and mushroom type as well as nylon filament hook types. A host of differences exist within the broad and all encompassing field. Patents are issued upon patentable versions of these fasteners and their manufacture on a consistent basis. In addition, there exists a wide array of different manufacturers who produce different fastener combinations under different labels. The field is not so limited as the Office Action would tend to suggest which should be self-evident by the failure of the final rejection to cite even one patent or reference possessing the uniquely different claimed characteristics of Applicant's ball retrieving attachment herein. The field is vast and there exists no teaching or suggestion of record directing or motivating the artisan towards a unique claimed ball retrieving attachment of a highly specialized unique characteristic which accomplishes a feat (tangential contacting and lifting a tennis ball) which others (i.e. all of the enabling 35USC103 patents of record) said could not be achieved. Is there not clear patentability under 35USC103 to discover an unknown ball retrieving attachment of an unknown ball retrieving function to produce an unknown and unexpected result which is most astounding in view of clear unrefuted 35USC103 patent teaching stating it cannot be done? The prior art solutions are diametrically opposed (e.g. change ball cover or make cupped

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<sup>3</sup> Step 1 of obviousness criteria per M.P.E.P. 2141

<sup>4</sup> Step 2 of obviousness criteria per M.P.E.P. 2141

<sup>5</sup> Step 3 of obviousness criteria per M.P.E.P. 2141

retrieving attachment etc.) to Applicant's unexpected discovery and results. The prior art taught futility of Applicant's solution to a long felt need, all of which add further objective evidence as to the patentability of the claimed method claims herein. Obviousness cannot be predicated upon what was heretofore unknown. Applicant's providing a ball retrieving attachment of uniquely different claimed characteristics, applying the unique ball retriever to the tennis racket shoulder and tangentially contacting and lifting the grounded tennis ball is unique, heretofore not deemed possible and thus clearly patentable under the M.P.E.P. 35USC103 criteria.

One cannot reconcile Applicant's method Claims 10-15 with the very explicit prior art teachings relied upon in rejecting Applicant's claims. *Urwin* may attach a strip of a totally different hook and loop fastener to a shoulder of a tennis racquet for a totally different purpose of removeably attaching the cupped shaped ball retriever thereto. In *Urwin*, only the cupped shaped ball retriever retrieves the ball. In *Feldi*, only the hook-loop combination involving changing the ball cover to either a hook or loop and relying upon the other to retrieve the ball serves to retrieve a non-tennis ball therewith.

The teachings of *Feldi* and *Urwin* clearly teach that hooked materials when not used in combination with their intended mating loop fastener are ineffective and especially when used as tennis ball retrievers. Both *Feldi* and *Urwin* suggest that by dramatically changing the hooking environment, the ineffectiveness of the hooking member may be changed. *Feldi* changes the ball cover so it incorporates the mating loop of the manufactured hook and loop combination so that both serve their intended function. *Urwin* takes a somewhat different approach by creating a cupped hooking member with a very large contacting surface area to enable the hooked material to retrieve a grounded tennis ball. Both these two patents (*Feldi* and *Urwin*) which bear a latter filing date than *Musslin* confirm applicant's position that the prior recognized that hooked

members per se were ineffective for use as a tennis ball retriever. Musslin adds nothing in that its teachings are so broad and indefinite that it could include a hooked metal wire as suggested by early workers. All of the later prior art patents discredit or disregard Musslin as teaching nothing. The exhaustive listing and prior art dissertations of U.S. Patent No. 6,652,397 to Lamson (filed two years after applicant's apart application) clearly substantiates the notorious art recognized knowledge that hooked nylon monofilament members as manufactured and traditionally used with mating loop members are not effective upon a mere tangential contact to lift a grounded tennis ball. Lamson (as with Feldi, Urwin, Ross, Schubert, Bellettinia, etc.) knowing the hooked member ineffectiveness adheres one fastener member to the racket and then engages the hook and loop together so as to expose the sticky adhesive backing to lift the tennis ball therewith.

Melbye has nothing whatsoever to do with nylon monofilament hooked fasteners per se, Melbye mentions SCOTCHMATE and VELCRO garment fasteners when used as hook and loop fastener combination as intended for use by their respective manufactures. The mushroom pedestal "hook" of Melbye does not work as tennis ball retrievers and are designed as taught by Melbye for use with the specially designed pedestal receiving fastening member combination. It should not be too difficult in light of all of the teachings of record to appreciate that fastening members are specially designed so as to produce a mating interlocking combination and are not designed to work effectively outside the perimeters of combinations other than their specially designed and manufactured mating fastener combination.

There exists hundreds of patents pertaining to manufacture of mating fastener combinations (e.g. see Exhibit B of the appeal brief of applications' parent application). As disclosed in these patents, a myriad of diverse fasteners can be produced by altering the

compositional make-up and processing conditions whereby the fasteners are made. The range of fasteners and selections which are available are immense. The manufacturing suppliers and type of fastening combinations form a large and vast range of diverse products of which the Office Action overlooks.

Turning more specifically to the Smerdon Patent, the Smerdon Patent mentions SJ3526 and SJ3527 SCOTCHMATE are mating hook and loop fasteners which have an adhesive backing reportedly water resistant to wetness created about a cyclist wet drinking tube apparently wetted by spillage by drinking from the tube.

The Smerdon patent is silent to any characteristic of either the hook fastener or the loop fastener component. The loop fastener is described as possessing good adherence to the wet water tube. The loop fastener allows the water tube to be fastened to the hook fastening component which is secured to a handlebar stem. Smerdon neither remotely teaches nor suggest the hooking component may be used alone much less alone to tangentially lift a grounded tennis ball.

Taken to its logical conclusion, the manner in which Smerdon has been applied against applicant's claims would in essence mean that no matter how far fetched the rationale for combining the 35USC103(a) references, the mere mention of a one common factor no matter how far removed from the task-at-hand would bar patentability of any invention by reason of obviousness. All of the obviousness tests would then become meaningless by the dominating reason that all hook and loop fastener are equipped with adhesive backings.

The Smerdon illogic of the final rejection becomes readily apparent when applied to applicant's method claims. There exists unrefuted evidence of record that the monofilament nylon hook component is ineffective and incapable of tangentially lifting all major brands of a



conventional tennis ball. The method of Smerdon involves adhesively applying the hook and loop fastening components to a water tube and a bicycle handlebar stem.

The obviousness issue hinges to what the prior art teaches, as a whole, coupled with a reasonable expectation of success. Why would that mystical artisan of ordinary skill remotely consider attaching another hook fastener to a tennis racquet to tangentially lift and retrieve a tennis ball, when the very art relied upon by the Examiner clearly states the hook material by itself to be ineffective. All patentees searched for a different alternative. Applicant again reminds the Examining Attorney of Feldi, Urwin, Ross, etc., and the Lamson patent which provides an excellent summary of the state of the art and alternate solution of using sticking or gluey adhesive backing of the fastening components since the hook component will not effectively work.

Applicant's method claims are directed towards "tangentially contacting and intermingling the felt nap of the grounded tennis ball ---- so as to engaged and hook onto the felt pile", lifting the hooked tennis ball and retrieving the tennis ball by all of which the adhesive backing of the hook and loop fastener component bears no relevancy. The irrelevant adhesive teachings of Smerdon bear no relevancy toward the method as claimed by applicant herein. Smerdon alone or in combination with the other references provides no motivation or suggestion of applicants claimed invention. There can exist no reasonable expectation of success of applicant's method claims simply upon the basis both the loop fastener and hook fastener have good adhesive backing for attaching beverage water tubing to bicycle handlebar stem. Where is the motivation or the expectation of success when the prior art resoundingly states that it is doomed for failure and cannot exceed?

The invention, as a whole, not only includes how the method is conducted but also what

the method accomplishes. Applicant's claimed method not only tangentially lifts a tennis ball (all major brands) but is capable of lifting three times the tennis ball weight, a phenomenal result especially in view of the prior art teaching that it cannot be done. The expectation that it will not work coupled with the unexpected superior in tangential lifting efficacy provide powerful indicia of the unobviousness of method claims 10-15.

The application of Smerdon as a third tier reference and applied in a manner which strains the sanity of an ordinary artisan rests upon a series of far fetched alleged factual presumptions. These presumptions include segregating the hook fasteners from the hook and loop fastener garment fastening combination of Melbye, equating a wet watering tube adhesive loop fastener backing with the Wimbledon and U.S. Open tennis championships (which according to the final rejection are played in "rain" and "wet conditions") so as to equate to the wet watering tube, there exists an adhesive problem with Feldi, Ross, Urwin, Lamson, etc., when no such problem is alluded by any of the patentees, the Melbye mushroom type male and female fastening components can be equated to a nylon monofilament fasteners, a bicycle handlebar stem and bicycle watering tube use of a hook and loop fastening combination may be equated to the use of a hooking component outside its normal usage to exhibit unknown and completely unexpected tangential tennis ball retrieval efficacy, the skilled artisan cognizant that all known hooked elements are incapable upon tangential contact to hook and lift all major tennis ball brands would inherently produce the claimed embodiments of applicant's method claims 10-15 when all of the enabling and meritorious patent teachings say it cannot be done, the skilled artisans will naturally and inherently conduct certain acts and practices contrary to clear patent teachings stating that such efforts are bound to fail (e.g. what Examiner suggest via Smerdon falls within the ambit).

The adhesive problem and hypothetical basis for applying Smerdon to Feldi or Musslin

bears no relevancy to the problem or the unexpected results achieved under applicant's claimed method claims 10-15. There exists nothing in the prior art which would suggest or remotely teach that such a grounded tennis ball retrieval method could be accomplished much less the unexpected results of the claimed invention when all the prior art and applicant's own teachings overwhelm the contradict the essence of the Examiner's 35USC103(a) rejection, then the overwhelming and uncontradicted prior art teachings should prevail.

There exists nothing which would remotely teach as suggest that any nylon monofilament hook would have the efficacy discovered by applicant and applicant alone. The monofilament hook requirements of claims 10-15 define a very unique and highly specialized (one-of-a-kind) hooking component which possess unique and unknown ball retrieving attributes, If applicant's invention were as obvious as the Examiner contends, then why have all of the enabling patentees (e.g. see Ross, Urwin, Feldi, Lamson, etc.) resoundly pointed out that what applicant has accomplished cannot be done?

Applicant's method claims set upon very tight tolerance for the nylon monofilament hook and what is required to provide the unexpected results. As pointed out, the appeal brief of appellant's patent application there exists literally hundreds of companies which provides a host of different types of fastener combinations. The patent literature as pointed out in the appeal brief, provides manufacturing processes which are able to produce an infinite number of different types of fastener combinations. The combinations and selections involve a large class of materials, all of which as relied in the final rejection are strictly based upon the use of the hook and loop fastener combination, not the hook components by itself.

Applicant's attorney believes that this response should place Applicant's application in condition for allowance. If for any reason the application is not considered to be in condition for

allowance, Applicant's attorney requests a telephone interview with Examiner Chiu so as to discuss the merits of this application and avoid an otherwise inevitable appeal.

The Applicant respectfully submits that the pending and finally rejected claims comply with the 35USC103 requirements, define novel and unobviousness subject matter over the art of record, and place the claims in condition for allowance. Reconsideration and withdrawal of the final rejection, and an early allowance of this application are respectfully requested.

Dated this 11th day of October, 2005.

Respectfully submitted,



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